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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,130	07/09/2003	Kyl W. Scott	064731.0347	1976
5073	7590	08/09/2007		
BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			EXAMINER RIVAS, SALVADOR E	
			ART UNIT 2616	PAPER NUMBER
			NOTIFICATION DATE 08/09/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/616,130

Applicant(s)

SCOTT ET AL.

Examiner

Salvador E. Rivas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4,5,7,9-12,14-15,17,19-22,24-27 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 1,3,6,8,13,16,18,23,26 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/23/2004 & 04/25/2006.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements submitted on January 23, 2004 and April 25, 2006 have been considered by the Examiner and made of record in the application file.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

3. **Claim 12** is objected to because of the following informalities:

On line 4 of page 6, replace the word "coupled" with the word "including or associated" in order to provide precision and clarity to the language of the claim.

Appropriate correction is required.

**Claims 8, 18, and 28** are objected to because of the following informalities:

On line 6 of pages 5 and 8, as well as on line 22 of page 10, replace the word "fist" with the word "first" in order to provide precision and clarity to the language of the claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 3, 6, 8, 13, 16, 18, 23, 26 and 28** recite the limitation "the respective second time stamp". There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 2, 7, 12, 17, 22, 27, and 32** are rejected under 35 U.S.C. 102(b) as being anticipated by **Turner (U.S. Patent # 5,339,311)**.

Regarding **claims 2, 12, 22, and 32**, Turner teaches a system for processing data packets, comprising: a node (Fig.1 @ 22) operable to receive a data stream; and a processor (Fig.2 @ 26) coupled to the node and operable to (Column 3, Lines 4-8): insert a plurality of marker packets into the data stream at time intervals, each marker packet comprising a respective first time stamp indicative of the time the marker packet is inserted (Fig.2 @ 38, Column 1, Lines 54-58 and Column 3, Lines 31-35); and calculate for at least one data packet an estimate of an age of the data packet based on a current system time and the respective first time stamp of the last marker packet that was inserted into the data stream before the data packet (the last marker packet being considered to be the most recent packet that is to be stored in the resequencing buffer

after an age and a slot have been assigned to said data packet.; Fig.4, Column 3, Lines 59-63).

Regarding **claims 7, 17, and 27, and as applied to claims 2,12, and 22 above**, Turner teaches a system wherein the respective first time stamp indicative of the time the marker packet is inserted is the time at which the marker packet enters a region selected from a group consisting of the node (time stamp circuit (Fig.1) and Column 1 Lines 54-56)), a bounded region of the node (Fig.2 @ 40,42), and an unbounded region of the node (Fig.2 @ 48, 50).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 4-5, 9-10, 14-15, 19-20, 24-25, 29 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Turner (U.S. Patent # 5,339,311)** in view of **Miller et al. (U.S. Patent # 6247058 B1)**.

Regarding **claims 4, 14, and 24**, and as applied to **claims 2,12, and 22** above, Turner teaches a system for processing packets using time stamps in a high speed data switch. However, Turner fails to teach wherein the processor further operable to discard the data packet if the calculated estimate of the age is equal to or exceeds a maximum allowed time.

Miller et al., teach a system for processing data packets wherein an output controller unit 96 (Fig.4) monitors the incoming data packets based on an active timeout interval that was assigned to the incoming packet and is able to discard said data packet if the calculated estimate of the age is equal to or exceeds a maximum allowed time (Fig. 9-10). It would have been obvious to one of ordinary skill in the art to combine Miller et al. with Turner for processing a data packet and based on a set parameter be able to determine the functionality of a data packet. The motivation being to efficiently manage the functions of incoming data packets in a network device.

Regarding **claim 5, 15, and 25, and as applied to claims 2,12, and 22 above**, Turner teaches a system for processing packets using time stamps in a high speed data switch. However, Turner fails to teach wherein the processor further operable to allow the data packet if the calculated estimate of the age is lower than a maximum allowed time.

Miller et al., teach a system for processing data packets wherein an output controller unit 96 (Fig.4) monitors the incoming data packets based on an active timeout interval that was assigned to the incoming packet and is able to allow the data packet if the calculated estimate of the age is lower than a maximum allowed time (Fig. 9-10). It would have been obvious to one of ordinary skill in the art to combine Miller et al. with Turner for processing a data packet and based on a set parameter be able to determine the functionality of a data packet. The motivation being to efficiently manage the functions of incoming data packets in a network device.

Regarding **claims 9, 19, and 29, and as applied to claims 2,12, and 22 above**, Turner teaches a system for processing packets using time stamps in a high speed data switch. However, Turner fails to teach wherein the time interval comprises an interval of time substantially equal to a maximum allowed time.

Miller et al., teach a system for processing data packets wherein the incoming data packets are assigned a time stamp and an active timeout interval. The active timeout interval is then used to determine whether the data packet is either ready for transmission or identifying packets that exceed the time interval and said data packet needs to be discarded (Column 4, Lines 50-54 and Column 8, Lines 28-33). It would

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have been obvious to one of ordinary skill in the art to combine Miller et al. with Turner for assigning a time interval parameter to determine the functionality of a data packet. The motivation being to efficiently manage the functions of incoming data packets in a network device.

Regarding **claims 10, 20, and 30, and as applied to claims 2,12, and 22 above**, Turner teaches a system for processing packets using time stamps in a high speed data switch. However, Turner fails to teach wherein the time interval comprises an interval of time less than a maximum allowed time.

Miller et al., teach a system for processing data packets wherein the incoming data packets are assigned a time stamp and an active timeout interval. The active timeout interval is then used to determine whether the data packet is either ready for transmission or identifying said data packet has exceeded the time interval and said data packet needs to be discarded (Column 4, Lines 50-54 and Column 8, Lines 28-33). It would have been obvious to one of ordinary skill in the art to combine Miller et al. with Turner for assigning a time interval parameter to determine the functionality of a data packet. The motivation being to efficiently manage the functions of incoming data packets in a network device.

**Claims 11, 21, and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Turner (U.S. Patent # 5,339,311)** in view of **Levi et al. (U.S. Patent Publication Application # 2003/0140116 A1)**.

Regarding **claims 11, 21, and 31, and as applied to claims 2,12, and 22 above**, Turner teaches a system that introduces a marker packet in the form of a time



stamp to incoming data packets. However, Turner fails to teach wherein the marker packet further comprises a plurality of error correction bits.

Levi et al. teach the formatting of an active data stream with certain logical structure codes that can determine packets characteristics and functionalities (Fig. 3 @ 28, 40, 42). It would have been obvious to one of ordinary skill in the art to combine Levi et al. with Turner for formatting multiple data streams with a variety of logical structures (e.g. time stamp, error correction codes, etc.) that define the characteristics and functionality of incoming data packets. The motivation being to efficiently manage the functions of incoming data packets in a network device.

***Allowable Subject Matter***

5. **Claim 1** is allowed.

The following is of statement for the reasons for the indication of allowable subject matter.

Regarding **claim 1**, the best prior art found during the examination of the present, **Turner (U.S. Patent # 5,339,311)** in view of **Miller et al. (U.S. Patent # 6247058 B1)**, fails to teach inserting a plurality of marker packets into the data stream at time intervals, each marker packet comprising a respective second time stamp indicative of the time at which the marker packet enters a region selected from a group consisting of the node, a bounded region of the node, and an unbounded region of the node, the second time stamp comprising a second number of bits, the second number of bits being greater than the first number of bits, calculating for at least one data packet an estimation of an age of the data packet based on a current system time.... the

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respective second time stamp of the last marker packet that was inserted into the data stream before the data packet, and the calculation of the age of the data packet obtained by the following equation:

$$T_c - T_m | N\text{-bit subtraction} + T_m - T_{\text{stamp}} | n\text{-bit subtraction}$$

where  $T_c$  is the current system time,  $T_m$  is the respective second time stamp,  $T_{\text{stamp}}$  is the respective first time stamp,  $N$  corresponds to the second number of bits, and  $n$  corresponds to the first number of bits.

**Claims 3, 6, 8, 13, 16, 18, 23, 26 and 28** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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**Hand-delivered responses** should be brought to

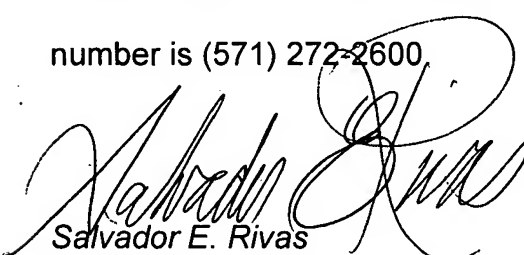
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Any inquiry concerning this communication or early communications from the Examiner should be directed to Salvador E. Rivas whose telephone number is (571) 270-1784. The examiner can normally be reached on Monday-Friday from 7:30AM to 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272- 3078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.



Salvador E. Rivas  
S.E.R./ser

July 23, 2007



KENNETH VANDERPUYE  
SUPERVISORY PATENT EXAMINER